Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

| | | |
|---|---|---|
| In the matter of | ) | MM Docket No. 99-25 |
| Creation of a Low | ) | RM-9208 |
| Power Radio Service | ) | RM-9242 |

Comments of
The JET Broadcasting Co., Inc.

Background of Respondent

JET Broadcasting Co, Inc. ("JET") has been a Commission broadcast licensee since 1951 when it was established by Myron Jones, its majority owner and present CEO. Myron Jones' background in broadcasting is lengthy, extending back to 1943 when he was a station engineer in Youngstown, Ohio. He has established and/or upgraded AM, FM and television facilities in Erie, Pennsylvania, Youngstown, Ohio and Pittsburgh, Pennsylvania over a period of some four decades. In his life work, Mr. Jones has been closely involved with Commission allocation processes for both AM and FM stations, beginning with his first FM station, WHOT(FM) in 1958 (which in that year was the second operating FM station in Youngstown, Ohio). Mr. Jones has remained active to the present time and is closely involved with two Class A FM stations in Erie, Pennsylvania licensed to JET Broadcasting Co., Inc. 1/

1/ The JET Broadcasting Co, Inc. stations are WJET(FM) and WFGO(FM), both licensed to Erie, Pennsylvania. "JET" or its principals formerly owned stations WJET(AM) and WJET-TV Channel 24, ABC Erie; WHOT AM/FM, Youngstown, Ohio and WEEP AM/FM, Pittsburgh, Pennsylvania. The formerly owned Erie and Youngstown stations were operated for some thirty years, the Pittsburgh stations for eighteen years.

## SERVICE PROPOSALS AND ISSUE ANALYSIS

### A. Need for Low Power Radio Service (10-14)

Conceivably, there can be "need" for a low power service, though this respondent is not persuaded by the Commission's reference to inquiries. 1/ Determining "need" is more complex and will need to be determined through more avenues than have been expressed in the Commission's notices. Many of the Commissions aims appear well intentioned and provisionally viable. However, the technical problems involved with limited spectrum, and the clutter and congestion that could result when numerous stations are squeezed into so-called "clear spaces", can be seriously deleterious to our radio industry and the listening public. In addition, we believe the immense regulatory burden incident to a great number of unseasoned licensees is a matter requiring the most careful analysis. Unless a more sophisticated method of application for these facilities can be devised, it is likely there will be a "homestead" rush of innumerable applicants, with most being completely unprepared for the responsibilities incident to a meaningful broadcast station. Regulating problems could very well exceed the limits and capabilities of the Commission.

1/ Up to a million or so persons will express interest in owning a radio station, inspired usually because they would enjoy having a microphone. It is a very long journey between talking on the air or playing favorite records to a business, or at least an entity capable of providing meaningful service designed to fill a present need.

**B. Spectrum Considerations (15-21)**

We agree the Commission is correct in believing a new service, as envisioned, would not be useful unless it is present on radios of general use. We are concerned that the FM band may be more fragile than imagined, and the idea of sandwiching the LPFM stations by adjusting interference ratios could bring future grief, most particularly with respect to instituting In Band On Channel digital broadcasting (IBOC). IBOC proposals are based on existing interference protection requirements. These systems use side bands of the analog signal to transmit the digital signal without the need for additional spectrum. Any alteration to the second adjacent channel spacing requirements could harm this transition to digital. Intense congestion of the FM spectrum in highly populated areas has been a problem in European countries for some time. The United States should not repeat the mistakes that have occurred in Europe, rather it should learn from their mistakes. Accordingly, it is likely that additional knowledge of these matters could be gained in examining experiences encountered by the governments of France, Italy and possible other countries who have had to solve problems of congestion while facing great public revulsion. (See Exhibit No 1.) **Additional comment on interference to this respondents Erie, PA station is discussed in Exhibit No. 2.**

We respectfully suggest, as an alternative, that the Commission not dismiss use of the AM band for a possible new service so quickly. True, the band is near saturation in most highly populated areas, however, spacing between many stations is sufficient to permit quite a number of low powered stations, ie; 25-100 watts for daytime only operation,

without injury to existing facilities. The low frequencies of the AM band in most sections of the country offer such excellent propagation efficiency that a low powered station, as noted, could likely serve areas equal to an area that could be served by the proposed LP1000 Class FM stations. Additionally, the newly instituted expanded band appears to have considerable opportunity for daytime stations sufficiently removed from the relatively sparse number of operating stations on that band. AM daytimers in this upper area where propagation is less efficient could conceivably serve smaller areas effectively with 50-100 watts power at its present stage. 1/

The Commission speaks of unique interests to be served by the proposed low power FM stations. These same unique interests could likely be served adequately with a daytime radio station. Such a station would certainly create a "voice" within communities of varying cultures, and racial minorities not served by larger stations.

**C. Technical Overview of LPFM Services (22-37)**

LP1000 stations

If unique interests, cultural enclaves and smaller groups of newly arrived racial minorities are prominent among those that could utilize a low powered service, it is respectfully

1/ The administrative burden to the Commission could be eased considerably for a class of low power AM stations by requiring that the applicant employ a qualified consulting engineer who would certify that operation at a stated power from a specified transmitter site would not cause prohibited overlap interference to any existing station. Further, the engineer could be required to certify that he or she has personally inspected the transmitter site and finds it acceptable.

suggested that the LP1000 Class stations be restricted to major markets where these persons may exist in relatively large numbers and thus occupy relatively large areas where a signal contour of 60DBU, with coverage out to about 9 miles, may be necessary to provide a viable service.

The LP1000 Class station, if it is allocated to medium and smaller markets, is highly unlikely to serve very small groupings of racial minorities and persons of other cultures requiring their own voice. A service to these groups, with an LP1000 class station, would not be commercially viable. Accordingly, it would become just another competitor to the plethora of radio stations serving most medium markets. In the medium markets are the very broadcasters the Commission has acknowledged as suffering the greatest competitive disadvantages, competing with ever-growing consolidation. It is also in these medium markets that the greatest number of LPFM stations will be possible. One thing the Commission could do for these independent broadcasters is spare them the additional competition that will ensue from an entirely new class of station, and one in which they are not entitled to participate. Alternatively, the Commission could make ownership of LP1000 stations in markets smaller than the first 50 markets available to broadcasters who are not associated with a consolidated group.

The Commission questions if the service areas available to an LP1000 Class station would be large enough to sustain an advertising base. The answer, in our opinion, is in

the affirmative. In major markets, such a station would obviously be located within the special interest audience areas selected to be served by the station. In major markets, this number would likely exceed 50,000 persons, which should provide more than sufficient base to conduct an economical operation.

With respect to medium markets, we note that such a station would serve all or virtually all of an urban area, that being, the city and its contiguous suburbs. As a quick study, we determined from a Rand-McNally atlas, which shows urban areas shaded in orange, that our market, Erie, Pennsylvania, could be served from an LP1000 station centrally located within the Erie urbanized area, which extends approximately six miles in the two maximum directions from a center city location. In this market, an additional three miles to six miles of 60DBU coverage would extend into surrounding rural areas. Choosing at random from other medium markets on Rand-McNally maps, essentially the same statement could be made for Ft. Wayne, Indiana; Lincoln, Nebraska; Springfield, Illinois and Canton, Ohio, to name a few. Accordingly, for the medium markets, an LP1000 station would certainly be overkill in reaching select and/or unique populations.

**Should the authorized service of any new low power class station be commercial, non-commercial or both?** We believe there would be a number of important advantages to a non-commercial requirement, assuming the non-commercial requirement would

require formation of a non-profit entity to function pursuant to appropriate bylaws and operate with a board of directors. Such an entity would be less likely to condone an irresponsible operation or allow unsuitable programming. Additionally, those who would be underwriters necessary to support the endeavor would unlikely be involved where inappropriate programming or an irresponsible operation was present. Were these stations to be commercial and depend upon spot advertising, the client list might very well include a preponderance of borderline businesses, such as nude dance clubs, fortune tellers, etc. Accordingly, it is suggested that a non-commercial status for LPFM stations could substantially ease the regulatory burden of the Commission, should this type service be instituted.

The Commission can likely recall lessons learned from citizens band radio, which began with a modest license requirement and ended with unlicensed pirates operating with all manner of disregard for Commission regulations. We believe that Canada had a poor experience with citizen band stations prior to its adoption in the United States.

**LP100 Stations**

In our opinion, LP100 Class stations could be utilized for serving limited areas where persons having unique broadcast needs might be located. As well, this class of station could do very well in serving small communities of 2,500 (more or less) when functioning for the purpose of providing a first local service. We can imagine such a station serving a certain small, remotely located community in Erie County with a

population of around 2,000. This outlying community's main industry is a large state prison. Hence, it could have unique needs for which we believe the Commission is attempting to develop a service.

**D. Interference Protection Criteria and E. LPFM Emissions and Bandwidth (38-56)**

These subjects are best commented upon by currently practicing engineers, however, we would like to call attention to a position statement of du Treil, Lundin & Rackley, Inc., a highly respected engineering firm, well known to the Commission. In their statement, they note that it should be remembered that presently licensed stations do provide meaningful service beyond their normally protected contours. The present allocation system is based on keeping stations spaced at minimum distances from one another to avoid interference to their normally protected signal contour at tangent points between them. Accordingly, there are large areas located outside normally protected contours and away from tangent points that receive interference-free radio service. Placing a large number of stations within the FM band will erode service within these areas and significantly reduce the ability of presently licensed FM stations to provide interference-free service to the listening public.

**F. Ownership and Eligibility (57-67)**

So long as the LPFM stations, as a specialized service group, are not equipped to compete with full power broadcast licensees, the Commission's suggested criteria

appears reasonable and appropriate, though we would summarily exclude any individual, ie: pirate, who is known to have continued an illegal operation after being officially notified. This type individual would, in our opinion, be prone to operate with excess power, over-modulation, defective equipment, excessive antenna height design, etc., not to mention, irresponsible programming and with little adherence to the Commission's rules. We respectfully suggest the Commission conduct a study of current pirate operations to assess the value of their service and their operational conduct (in so far as the general public is concerned).

## SUMMARY

It is likely the Commission will not achieve its stated desires with the LPFM service now envisioned. For example, if the Commission eliminates second and third adjacent channel protections, only a relatively few stations would be available in the urban markets. Since serving major urban communities and neighborhoods is a stated goal, we believe this will not be achievable. Obviously, it is inappropriate the vast resources necessary to establish this new service if it will be unable to serve the listeners for which it is intended. At best, the proposed new service entails considerable risks to the future of IBOC, a likelihood of actual interference to existing stations and a near certainty that the public will perceive their FM band as greatly more cluttered with their favorite radio stations being interfered with on a scale not now envisioned. This is certainly the case when one takes into account that listeners have always enjoyed reception beyond the technical contours, which appear only on engineer's maps and are wildly flexible.

An additional consideration is that absent a far more sophisticated allocation procedure, minority and female ownership will not increase. Since stations will be allotted on a first come/first serve basis, or through an auction process, there is no guarantee that minority and female owners will ultimately obtain the stations, nor is there a likelihood that persons equipped to properly operate such stations will be rewarded in this kind of procedure. We have long noticed that the Commission's resources are limited, and compared to days past there are many gaps in adequate enforcement of its broadcast rules and regulations; the present scourge of pirate radio operations being a notable example. It is frightening to imagine the result if the LPFM service is inaugurated and these certain pirates are unable to obtain a license. With LPFM instituted, convenient availability of low power equipment will come onto the market and may only be an inspiration for additional pirate operations with more powerful transmission facilities. Such a new service will certainly overburden the Commission's limited resources, hence we wonder where the time to provide assistance to LPFM applicants will be found. We respectfully suggest that the Commission may be taking on extensive new burdens it may be unable to accomplish.

Respectfully submitted this 30th day of July, 1999 by:

THE JET BROADCASTING CO., INC.

Myron Jones
Chief Executive Officer

**Exhibit No. 1**

# FM OPERATIONS

# FRANCE AND ITALY

*Spectacles* (less easy to follow the latter's classifications, but pocket-size like *Pariscope*). *Le Figaro* also enters the fray on Wednesdays with a well-listed entertainments supplement, *Figaroscope*.

**Radio** If you tune in to FM in Paris, you will be amazed by what bounces off the crowded and varied airwaves. No longer the bonanza that it was in the early 1980s, when anybody and everybody jumped on the free-radio bandwagon, the number of stations is now—thankfully—controlled.

Minority tastes are catered to, from **Judaïque FM** (94.8 MHz) to **Radio Notre-Dame** (100.7 MHz) for Christians, or **Beur FM** (106.7 MHz) for the North African community. **Media Tropical** (92.6 MHz) takes you even farther, specializing in African and Caribbean sounds. The quaint-sounding **Chérie FM** broadcasts on 91.3 MHz. News is broadcast around the clock on **France Infos** (105.5 MHz), while the latest update on Parisian traffic jams interjects a mixed music program on **FIP** (105.1 MHz).

Classical music fans should tune in to **France Musique** (91.7 and 92.1 MHz), though presenters tend to chat, whereas **Radio Classique** (101.1 MHz) provides virtually nonstop music. Not as influential as they were, but still powerful, are current affairs and variety stations such as **France Inter** (87.8 MHz), **RTL** (104.3 MHz), **Radio Monte Carlo** (103.1 MHz), and **Europe 1** (104.7 MHz).

For unadulterated rap/rock/House/world music, your best bet is to tune in to **Radio Nova** (101.5 MHz) or **NRJ** (100.3 MHz).

The **BBC World Service** can be found on medium wave, 648 KHz.

**Television** The two main state channels, **FR2** and **FR3**, still have a long way to go in the quality of their programs, but the recently privatized **TF1** is even worse. Addicted to trite panel discussions, variety shows, reruns of "family" films, and dubbed American police shows, none of the channels has a clear identity. France 2 occasionally rises out of mediocrity with a good documentary and, like FR3, gives cultural events reasonable coverage.

**Canal Plus**, a private subscribers' channel launched in 1983, has been very successful in its rotation of recent films, good documentaries, sports events, and children's programs. It starts the day at 7 with


the CBS Evening News. W
Berlusconi's **Le Cinq** finall
disappeared, its slot was t
French/German Cultural C
**Arte**. The sixth channel (M
in 1987, is increasingly pop
Mixing music videos with
also schedules some exce
documentaries and TV film
(dubbed). Arte, whose pro
all coproduced with Germa
provides an interesting alt
mainstream channels, dev
of its coverage to cultural
minority interests. Satellite
picked up easily, and most
are linked up.

**Money Matters**

The French currency is th
(symbolized by FF), which
into 100 centimes. Coins
10, 20, and 50 centimes;
and 20 francs. Banknotes
francs, continue with 50 f
francs, 200 francs, and er
francs. The latter are hard
in taxis and small shops,
being given them when y
money. Foreigners can br
currency up to the generc
50,000 francs, in any form
travelers' checks, Euroch

**Banks** Most Parisian banl
9–4:30, Monday to Friday
at noon the day before ar
holiday (see below). They
have a foreign exchange
which charges a small co
on any operation. If you a
confronted with a choice,
likely to offer the best rat
lowest commission. Banl
display credit card symbc
will also advance cash or
of your card. Remember
your passport on you for
transaction. Bureaux de
outside any bank take Vis
sometimes Diners Club a
MasterCard, and often gi
instructions in English.

For emergency exchan
weekends, go to the Cha
Elysées, where the CCF
Champs-Elysées, metro:
remains open daily excep
8PM. There is also a 24-h

WELCOME TO

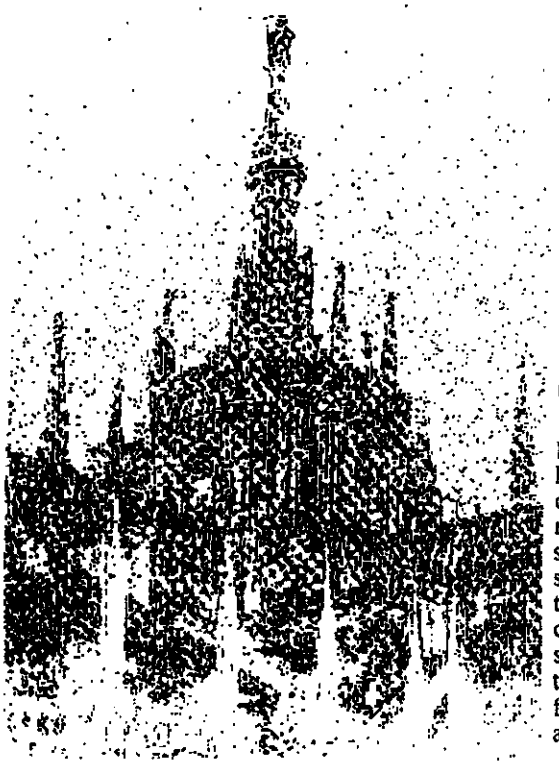
IRRS-BA

THE HOME OF INTERNATIONAL RADIO

# IRRS-Globe Radio Milan: 1979-1998
# English Broadcasts on FM in Milano, Italy

## FM Radio in Milano

Like most of other radio listeners in Europe, the Italians listen almost exclusively to hi-fi (stereo) programs aired on the FM band, rather than Medium Wave (AM) or Shortwave. There are obvious advantages in receiving FM vs. Mediumwave or Shortwave in terms of audio fidelity. Mediumwave broadcasts - manly RAI's, the national state controlled radio network -,



however, had a revival lately due to heavy mutual interference of the thousands of FM signals on the Italian peninsula. Today together with the newly introduced Radio Data System (RDS) on FM, Mediumwave/AM is the only option to remain tuned to the same station when distances above 10-15 miles are traveled by car. Mediumwave, although lacking in fidelity, provides a much wider coverage than FM due to the lack of co-channel interference, and it is often used for example to tune into the news service offered by RAI.

It must be noted that Italy has been pioneering private FM broadcasting since as early as 1975, when, in addition to the already established three national state owned RAI channels (also on AM/Medium Wave) a number of small and aggressive FM stations went on the air. Today thousands of FM stations and a few private national networks operate legally in the country. But very often reception conditions are quite critical, especially in large towns.

Even today, in fact, driving around the greater Milano nearly one-hundred different stations can be found on a standard receiver. Very often stations operate on the same channel from locations just a few miles apart; more often the separation is just 50 kHz (or less). This situation has been sometimes depicted as a *"frequency jungle"* by several foreign observers who compare this very competitive market to the cleaner situation in other countries. Clearly, for most stations coverage is a problem especially in a large urban areas. But the situation should be solved only when a frequency allocation plan and the elimination of a large number of stations. After years since a law first attempted to regulate private broadcasting (1990) no frequency allocation plan has been approved yet.

## The Legal Situation

Although legally established, all private FM and TV stations in Italy still lack frequency and power coordination from the Italian PTT Ministry. The first Broadcasting Act which was approved in August, 1990, after many aborted attempts to rule the Italian frequency spectrum, set a term of two years (expiring in August 1992) for the PTT Ministry to publish frequency allocation plans for both TV and radio stations in the country, and assign formal licenses to only some of the existing operations. To this date, however, we are still in the same situation as of 1990, as far as frequency occupancy and interference, especially in larger towns. The only for of "coordination" and elimination of interferences has been put in place by larger networks who started buying off frequencies from the smaller broadcasters, thus attempting to clear

WELCOME TO

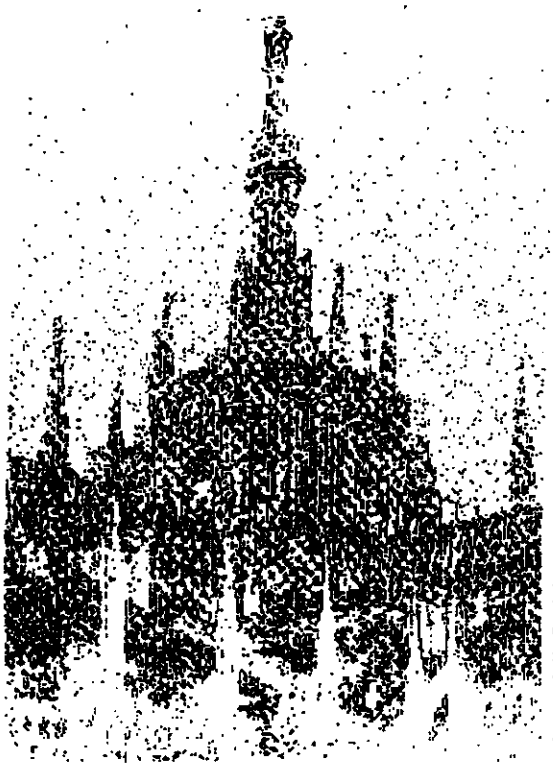
IRRS-IBA

THE HOME OF INTERNATIONAL RADIO

# IRRS-Globe Radio Milan: 1979-1998
# English Broadcasts on FM in Milano, Italy

## FM Radio in Milano

Like most of other radio listeners in Europe, the Italians listen almost exclusively to hi-fi (stereo) programs aired on the FM band, rather than Medium Wave (AM) or Shortwave. There are obvious advantages in receiving FM vs. Mediumwave or Shortwave in terms of audio fidelity. Mediumwave broadcasts - manly RAI's, the national state controlled radio network -,



however, had a revival lately due to heavy mutual interference of the thousands of FM signals on the Italian peninsula. Today together with the newly introduced Radio Data System (RDS) on FM, Mediumwave/AM is the only option to remain tuned to the same station when distances above 10-15 miles are traveled by car. Mediumwave, although lacking in fidelity, provides a much wider coverage than FM due to the lack of co-channel interference, and it is often used for example to tune into the news service offered by RAI.

It must be noted that Italy has been pioneering private FM broadcasting since as early as 1975, when, in addition to the already established three national state owned RAI channels (also on AM/Medium Wave) a number of small and aggressive FM stations went on the air. Today thousands of FM stations and a few private national networks operate legally in the country. But very often reception conditions are quite critical, especially in large towns.

Even today, in fact, driving around the greater Milano nearly one-hundred different stations can be found on a standard receiver. Very often stations operate on the same channel from locations just a few miles apart; more often the separation is just 50 kHz (or less). This situation has been sometimes depicted as a *"frequency jungle"* by several foreign observers who compare this very competitive market to the cleaner situation in other countries. Clearly, for most stations coverage is a problem especially in a large urban areas. But the situation should be solved only when a frequency allocation plan and the elimination of a large number of stations. After years since a law first attempted to regulate private broadcasting (1990) no frequency allocation plan has been approved yet.

## The Legal Situation

Although legally established, all private FM and TV stations in Italy still lack frequency and power coordination from the Italian PTT Ministry. The first Broadcasting Act which was approved in August, 1990, after many aborted attempts to rule the Italian frequency spectrum, set a term of two years (expiring in August 1992) for the PTT Ministry to publish frequency allocation plans for both TV and radio stations in the country, and assign formal licenses to only some of the existing operations. To this date, however, we are still in the same situation as of 1990, as far as frequency occupancy and interference, especially in larger towns. The only for of "coordination" and elimination of interferences has been put in place by larger networks who started buying off frequencies from the smaller broadcasters, thus attempting to clear

their own frequencies by killing de-facto the smaller stations which were the spirit of the so called *free radio* scene that broke the Italian State monopoly in the 70's. Today, only a few small stations survive, especially in rural areas, and recent proposals to rule once again the market by the Italian Government seem to favor the largest network vs. the smallest, but nevertheless, important smaller stations.

As for radio, the 1990 Broadcasting Act identifies two types of license: *commercial* and *non-commercial* or *community radio* (very similar to the US concept of *public radio*), both licenses were granted on a local or national coverage basis. All applications for a license had to be filled by October 20, 1990. After that date, the law states that no new station can be built, nor other application accepted and, more importantly, no technical parameter of every station (e.g. antenna, frequency, transmitter power, etc.) can be changed. Only just recently (April 1998) a provision has been added by decree to slightly modify the technical characteristics of a transmitter, if, for example, another transmitter belonging to the same station is shut down in the same area.

In the Milano city area alone, commercial radio stations are outnumbering non-commercial/community operations by more than a factor of 30. NEXUS-IBA got a formal license to operate IRRS-Globe Radio Milano on FM 88.85 MHz as a local community broadcaster in 1995, and an authorization to operate an international Shortwave station also from Milano, Italy.

## Our History

Milano is a very cosmopolitan city in Northern Italy. Its weekly specialized exhibitions at the local Fair attract many foreign visitors every year. Here live quite a large number of English speaking foreign residents (20,000+) as well as many Italians who speak this language fluently. All that together with the interest of several international broadcasting organizations, consular representatives in Milan, newspapers, listeners and friends helped us to create and maintain IRRS-Globe Radio Milan since 1979. IRRS-Globe Radio Milan is a unique and the first English speaking station in Italy.

Back in 1979, the fact that most of the Italian radio listeners in large towns do not listen at all to international Shortwave, or Long Wave broadcasts, gave us the idea of starting a local English speaking FM station in Milano. No DBS (radio or TV) satellites were yet available, and newspaper and magazines were almost all international media available in town at the time. The station started with very simple equipment, a lot of enthusiasm, and with just only a few Watts all the Milano city area was covered.

Globe radio milan
Italian radio relay service

Today IRRS-Globe Radio Milan exists to provide NEXUS-IBA members and broadcasters a facility in what the National Geographic magazine defined as *"Both a factory and a showcase for Italian products, a hub for the comings and goings of trade in Italy and much of western Europe, but also a city of fine food and subtle elegance and cultural wealth"*. In the early beginnings when IRRS-Globe Radio Milan experienced little or no interference from other stations, there were listeners who tuned into our broadcasts from as far as 30-50 km away. Now, even with professional equipment and higher power, the heavy competition from commercial stations have undoubtedly reduced the station's coverage to just about one third of the entire city area. A situation very common to other small stations in Milano, which did not improve when licenses were assigned in 1990.

Since its beginning, IRRS-Globe Radio Milan has been airing the best selection of English programming available on Shortwave. Over the years, programs from the BBC World Service, BBC English by Radio, Deutsche Welle, Radio Nederland, Radio Sweden, Swiss Radio International, HCJB, VOA, Radio Beijing, Family Radio, Radio Earth, UNESCO and United Nations Radio, as well as many other individuals and broadcasting organizations has been aired to our (your) listeners in Milano, often preceding what is now being offered as VOA Europe or BBC World Service via satellite in many other European towns.

*NEXUS-IBA is neither governmentally, nor privately funded. Although provisions exist in the NEXUS' charter to accept financial donations from other bodies and institutions, all current operations are entirely financed by our members broadcasters. Moreover no advertising is currently on air on any NEXUS-IBA station. All NEXUS-IBA personnel are professionals who have a full time job elsewhere, and devote most of their spare time coordinating NEXUS-IBA activities as volunteers. The heavy use of state-of-the-art computer automation, digital broadcasting, and, only recently, the availability of satellite feeds, together with our hard work, has made it all possible until now.*
*Needless to say that all this could not be accomplished, nor continue, without your interest and support. To support our activities please visit our support page.*

Exhibit No. 2

# INTERFERENCE PROBLEMS FOLLOWING ASSIGNMENT OF 80/90 DOCKET STATIONS

Stations assigned under the 80/90 Docket were quite often located with interference contours tangent or close to tangent with established stations, eliminating entirely useful coverage at the perimeter of these stations licensed service. Predicted FM propagation is intended only for the perfect world of engineering maps. In many cases, terrain and water path considerations have produced unintended results, further exasperating interference conditions. The presently crowded spectrum has, in addition, produced a periodic type of interference resulting from FM skywave, a phenomena that often occurs seasonally when thermal conditions serve to "duct" signals well beyond their normal horizon. "Ducting" is especially troublesome to stations located close to large bodies of water. Erie, Pennsylvania stations are affected from Canadian stations across Lake Erie and from US stations in Detroit and Buffalo. WJET(FM) operating on 102.3 mHz, for many years sustained periodic interference within its city grade contour (70DBU), often continuing for many hours over consecutive days. Thankfully, the Canadian government reassigned the offending Woodstock, Ontario station to a new frequency. The 102.3kHz Canadian assignment to Woodstock, however, remains presently unoccupied. Woodstock is rather close spaced to Erie, PA.

The WJET(FM) facility is an early assignment pursuant to the initial table of assignments (1964). The 80/90 Docket much later assigned 102.5 a first adjacent channel to nearby Edgewood, Ohio, with near tangent contours to WJET. Presently, with each station operating at 6kw, significant mutual interference is produced within the respective 60DBU contours. (This interference is based upon predicted contours.) Listeners driving west to Cleveland on I-90 often comment on the adjacent channel interference, which we note is more troublesome as it "tears" the desired signal, fragmenting reception, and can be more severe with less expensive receivers.

The object of the foregoing discussion is, of course, only a microcosm to the entire FM spectrum. It is not mentioned to refute the present FM allocation scheme, but to serve notice that great caution should be exercised in any further crowding of the FM spectrum where real world conditions produce troublesome effects as more closely spaced stations are allocated.

Further efforts, such as the elimination of the second and third adjacent channel protections, would clearly result in increased interference to existing broadcast signals and the loss of service to their listeners.